

dense. Fig. 8. Section of carpel of same. Fig. 9. Fruit of *Erigenia bulbosa*. Fig. 10. Section of carpel of same. Fig. 11. Fruit of *Cryptotænia Canadensis*. Fig. 12. Section of carpel of same. Fig. 13. Section of carpel wall of same. Figs. 1 and 4 $\times 2\frac{1}{2}$; 7, 9 and 11 $\times 5$; transverse sections $\times 27$; 13 $\times 125$.

BRIEFER ARTICLES.

Death of Dr. Wigand.—By the death of Prof. Albert Wigand, of Marburg, Hesse, the scientific world has lost a strong and able friend. He died in Marburg, October 22d, after a severe illness, at the age of sixty-five years. For many years he has held the position of professor of botany and director of the botanical garden connected with the university of that place. Being the only professor of botany in the university, his work was naturally subdivided; as director of the garden and lecturer in the pharmaceutical institute and of general botany, he had not much remaining time to devote to any one branch of the science, as so many German professors have done. Hence his name is not so well known to American scientists. Many of them, however, know him as one of the last of the German botanists who may be said to belong to the old school. In fact, it was his lot to live during one of the transition periods of science, and he was among the few who refused to fall in with the general current. He suffered from this more or less by the isolation which such conservatism always brings, but in no way did this serve to diminish his ardor for his work, or his usefulness in leading others to an enthusiasm in the pursuit of truth in a degree which few teachers are able to reach. Among the evidences of the former are numerous works and papers which he found time out of his busy life as teacher, from time to time to publish. In respect to the latter statement it is perhaps enough to say that he reckoned among his students such men as Eichler of Berlin, and Pfeffer of Tübingen. Whatever may be said concerning his peculiar views on certain points, it is quite certain no teacher could have been more careful and conscientious in presenting them to his hearers, simply as his own views, in carefully distinguishing between mere theories and established facts. Certainly none who ever came within the radius of his influence can doubt the sincerity of his character, his devotion to truth and entire consecration to its interests.—EMILY L. GREGORY.

The Genus *Iris*.—It is well known to botanists that Professor Michael Foster, the distinguished physiologist of the University of Cambridge, has for several years paid particular attention to the genus *Iris*, has in cultivation all the species and varieties he has been able to obtain, and has carefully studied the principal forms from seedling states through their whole development and in critical cases from generation to generation. He may be supposed now quite thoroughly to understand the Old World

species; and those of North America have not been neglected. But several are still in doubt or obscurity; and few of them, even those of the Atlantic States, have been sufficiently studied alive, although this is nearly indispensable. Professor Foster, according to the wishes of botanists who recognize the need of the undertaking and his unequalled fitness for it, is disposed to undertake an elaboration of the species; and he has appealed to me for aid in the difficult matter of procuring ripe seeds or living roots of certain American species and forms which are not in his extensive collection. He particularly wants *I. tridentata* and *I. tripetala* from the Atlantic side of our continent, *I. Hartwegi*, *I. Beecheyana*, *I. macrosiphon*, as well as two recent species of Watson, *I. tenuis* and *I. bracteata*, from the western portion. For these and for any other rare or local forms—for all wild Irises, except our common eastern species—an appeal is now made. Seeds and roots contributed to the botanic garden of our Cambridge will be thankfully received and cared for, and a goodly portion promptly transmitted to Professor Foster in Cambridge, England, where we may expect them to be fully investigated. For, in a letter to me Professor Foster writes, "I do not like to come to any conclusion about a plant until I have had it under my eyes alive, and know its whole story from seed to seed again. I mean I do not feel that I have really got hold of the form until I have done this, though of course one can learn a good deal short of that. Hence I am anxious to get hold of living plants. Your North American forms are most interesting when the morphology and geographical distribution are worked together, and in connection with the Asian forms."

Note that seed, to be of any good, should be thoroughly ripe; and that living roots are in best condition for transmission in early autumn.

ASA GRAY.

On petiolar glands in some Onagraceæ.—At a recent meeting of the Academy of Natural Sciences of Philadelphia, Mr. Thomas Meehan remarked that stipules were unknown in Onagraceæ, but in *Ludwigia* (*Isnardia*) *palustris* there were two minute conical gelatinous glands, at the base of each leaf, that appeared to be stipular. They existed in series of specimens representing the Atlantic and Pacific coast, and from Europe, those from California being larger than in specimens from other localities. They are found in all the species of *Ludwigia* and *Jussiaea* that he had been able to examine. In these they appeared petiolar rather than stipular. In the dried specimens of *Circea* a dark spot indicated the position occupied by the glands in other species. They mostly varied in form and exact position with the species, and only for having been wholly overlooked by describers might have afforded some good specific characters. The discovery he regarded as interesting, as confirming the views of those botanists who had brought *Turneraceæ*, in which the petiolar glands were known to exist, in close relation with *Onagraceæ*.